Patent Claims:

1. An actuating unit for an electromechanically actuated disc brake for automotive vehicles, which is disposed on a brake caliper wherein two friction linings (4, 5) respectively cooperating with a side face of a brake disc (6) are arranged in a manner displaceable to a limited extent, with one (4) of said friction linings (4, 5) being arranged so as to be directly movable into engagement with the brake disc (3) by means of an actuating element (7), through the actuating unit, while the other friction lining (5) is movable into engagement with the brake disc (3) through the action of a reaction force applied by the brake caliper, wherein the actuating unit comprises an electric motor (10) and at least one reduction gear (11) operatively arranged between the electric motor (10) and the first friction lining (4), and with the reduction gear (11) being formed of a threaded drive accommodated in a gear housing (19) and including a cylindrical guide piece (20) that is provided with a sensor device (43, 43a) for sensing the reaction force,
characterized in that the guide piece (20) has a reduced thickness of material or an aperture (48, 48a) in the area of attachment of the sensor device (43), and a prefabricated sensor module (50) that allows testing outside the guide piece (20) and forms the sensor device (43) is arranged in the area of attachment or within or above the aperture (48, 48a).

2. An actuating unit according to claim 1,
characterized in that the sensor module (50) includes a carrier element (51) on which a measuring element (52) and contacting means (53) are arranged.

3. An actuating unit according to claim 1 or 2,
characterized in that the carrier element (51) is welded, preferably laser welded, to the guide piece (20).

4. An actuating unit according to any one of claims 1 to 3,
characterized in that the carrier element (51) is configured as a tension member.

5. An actuating unit according to any one of claims 1 to 4,
characterized in that recesses or slits (55) are provided in the guide piece (20) close to the area of attachment of the sensor device (43, 43a).

6. An actuating unit according to claim 4,
characterized in that a contact grid (45) punched from metal or flexible foils is provided for contacting the sensor device.

7. An actuating unit according to claim 8*,
characterized in that an electric interface or a plug (46), to which the metal grid (45) is connected, is arranged in the area of the guide piece (20) facing the friction lining (4).

* translator's note: the correct appendency is '.... according to claim 1'